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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,860	09/18/2001	Manickam R. Sridhar	09150-013001	9903

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EXAMINER

TRAN, NGHI V

ART UNIT PAPER NUMBER

2151

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/955,860	SRIDHAR ET AL.	
	Examiner	Art Unit	
	Nghi V. Tran	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-9, 11-12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Hasegawa et al., U.S. Patent No. 5,878,029 (hereinafter Hasegawa).

3. With respect to claims 1, 9, 11, and 15, Hasegawa teaches a communication system for implementing an overall communication policy [fig.9] comprising:

- a first interface for accepting a first plurality of separate communication links forming a first trunked communication link [item 60 of fig.24 i.e. route a = 10M];
- a second communication interface for accepting a second plurality of separate communication links forming a second trunked communication link [item 61 of fig.24 i.e. route b = 10M]; and
- a plurality of processors [42-43 i.e. switches], each coupled to a corresponding different one of the first plurality of separate communication

links and coupled to a corresponding different one of the second plurality of communication links, and coupled to one another over a communication channel [figs.24-26];

- wherein each processor in plurality of processor is configured to implement a separate communication policy for data passing between the first trunked communication link and a corresponding one of the second plurality of communication links such that together the separate communication policies (i.e. each of requested bandwidth as route a or b) approximate the overall communication policy (i.e. usable bandwidth) [col.18, ln.13 - col.19, ln.62], and wherein the plurality of processors are further configured to communicate among one another to adjust the separate communication policies to adapt to data flows passing through the processors [col.4, lns.27-46 and fig.25 i.e. allow bandwidth increase].

4. With respect to claims 3 and 12, Hasegawa further teaches each processor in the plurality of processors has a copy of each communication policy (101 i.e. residual bandwidth table) in the communication system and communicates with the other processors in the plurality of processors to keep state information current for each such copy [figs.19-20].

5. With respect to claim 5, Hasegawa further teaches each processor in the plurality of processors mirrors state information (i.e. route a = 15M and route b = 10M on both

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route tables 62 and 63 indicating mirrors state) for reporting across the communication system [fig.19].

6. With respect to claim 6, Hasegawa further teaches each processor in the plurality of processors mirrors state information (i.e. route a = 15M and route b = 10M on both route tables 62 and 63 indicating mirrors state) for management across the communication system [fig.19].

7. With respect to claim 7, Hasegawa further teaches the overall communication policy is only implemented for traffic traveling from the first interface to the second communication interface [figs.19-21].

8. With respect to claim 8, Hasegawa further teaches the overall communication policy is implemented for traffic traveling between the first interface and the second communication interface in either direction [figs.19-21].

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al., U.S. Patent No. 5,878,029 (hereinafter Hasegawa) as applied to claim 1 above, and further in view of Howard, U.S. Patent No. 6,683,884 (hereinafter Howard).

11. With respect to claim 2, Hasegawa does not explicitly show adapting to data flows includes a first processor in the plurality of processors borrowing bandwidth from the second processor in the plurality of processors.

In a networking switching device, Howard discloses adapting to data flows includes a first processor in the plurality of processors borrowing bandwidth from the second processor in the plurality of processors [fig.2 and col.3, ln.8 - col.4, ln.24].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hasegawa in view of Howard by borrowing bandwidth from the second processor in the plurality of processor because this feature enables pre-selected classes to use more than their maximum bandwidth when there is bandwidth available [Howard, col.2, lns.23-25]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to limit the classes of traffic to a maximum bandwidth [Howard, col.2, lns.21-23].

12. Claims 4, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al., U.S. Patent No. 5,878,029 (hereinafter Hasegawa) as applied to

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claims 1, 9, and 11 above, and further in view of Raj et al., U.S. Patent No. 6,628,649 (hereinafter Raj).

13. With respect to claims 4, 10, and 13, Hasegawa does not explicitly show the plurality of processors is divided into a plurality of active processors and a plurality of standby processors, such that each processor in the plurality of active processors actively implements a communication policy on data, while a standby processor in the plurality of standby processors monitors the plurality of active processors for a failure of active processors, thus implementing the overall communication policy.

In a networking switching device, Raj discloses the plurality of processors is divided into a plurality of active processors (i.e. active switch components) and a plurality of standby processors (i.e. standby switch components) [col.4, Ins.6-39], such that each processor in the plurality of active processors actively implements a communication policy on data, while a standby processor in the plurality of standby processors monitors the plurality of active processors for a failure of active processors, thus implementing the overall communication policy [col.3, ln.56 - col.4, ln.38].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hasegawa in view of Raj by implementing switch redundancy because this feature offers with high levels of redundancy to allow continued operation in the event of failure [Raj, col.3, Ins.60-62]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to re-route data traffic in the event of network failures [Raj, col.3, ln.59].

Response to Arguments

14. Applicant's arguments, filed August 10, 2005, with respect to claims 1-13 have been fully considered and are persuasive. The previous rejection of claims 1-13 has been withdrawn.

15. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Patent Examiner
Art Unit 2151

NT


ZARNI MAUNG
JUNIOR PATENT EXAMINER